

CHAPTER 20

LPP-1 AND -1A LIFE PRESERVER ASSEMBLIES

Section 20-1. Description

20-1. GENERAL.

WARNING

The LPP-1, -1A life preserver assembly is not suitable for use by small children in Naval aircraft.

20-2. The LPP-1, -1A life preserver assembly is authorized for use by passengers in cargo or transport type aircraft, fixed or rotary wing, for sea survival situations.

20-3. CONFIGURATION.

NOTE

The LPP-1 and LPP-1A life preserver assemblies are identical with the exception of the mechanical inflation assembly. Orange storage container assemblies are optional equipment.

20-4. The LPP-1, -1A life preserver assembly (see [figure 20-1](#)) weighs approximately 3 pounds and provides a

minimum of 29 pounds of buoyancy. The LPP-1, -1A life preserver assembly consists of a single-compartment yoke-type flotation assembly, a pouch and belt assembly, an inflation assembly and a storage container. Survival items are also provided. To make up the LPP-1, -1A life preserver assembly, all required components not supplied with the preserver must be individually requisitioned. See [table 20-1](#) for survival items.

CAUTION

Use only Polychloroprene adhesives and Polychloroprene-coated cloth and patches on Polychloroprene-coated LPP-1, -1A life preserver assemblies.

20-5. The flotation assembly is constructed of polychloroprene-coated nylon cloth. It is equipped with an oral inflation valve, a valve stem, survivor locator light attachments, a whistle pocket, a belt loop and an inspection record patch. See [figure 20-1](#).

Table 20-1. LPP-1, -1A Survival Items

Description	Quantity Required	Reference Number	NIIN	SM&R Code
Whistle, Type II	1	MIL-W-1053	00-254-8803	PAOZZ
Survivor Locator Light Assembly	1	68A94C14-1 (CAGE 30003)	00-142-5218	PAOZZ
Dye Marker	1	MIL-S-17980 (CAGE 81349)	00-270-9986	PAOZZ

Notes: 1. The Passenger Helicopter Aircrew Breathing Device System (PHABD) is authorized for use on the LPP-1 and 1A for Marine troop passengers during flights over water. Refer to NAVAIR 13-1-6.5 for attachment and maintenance procedures.

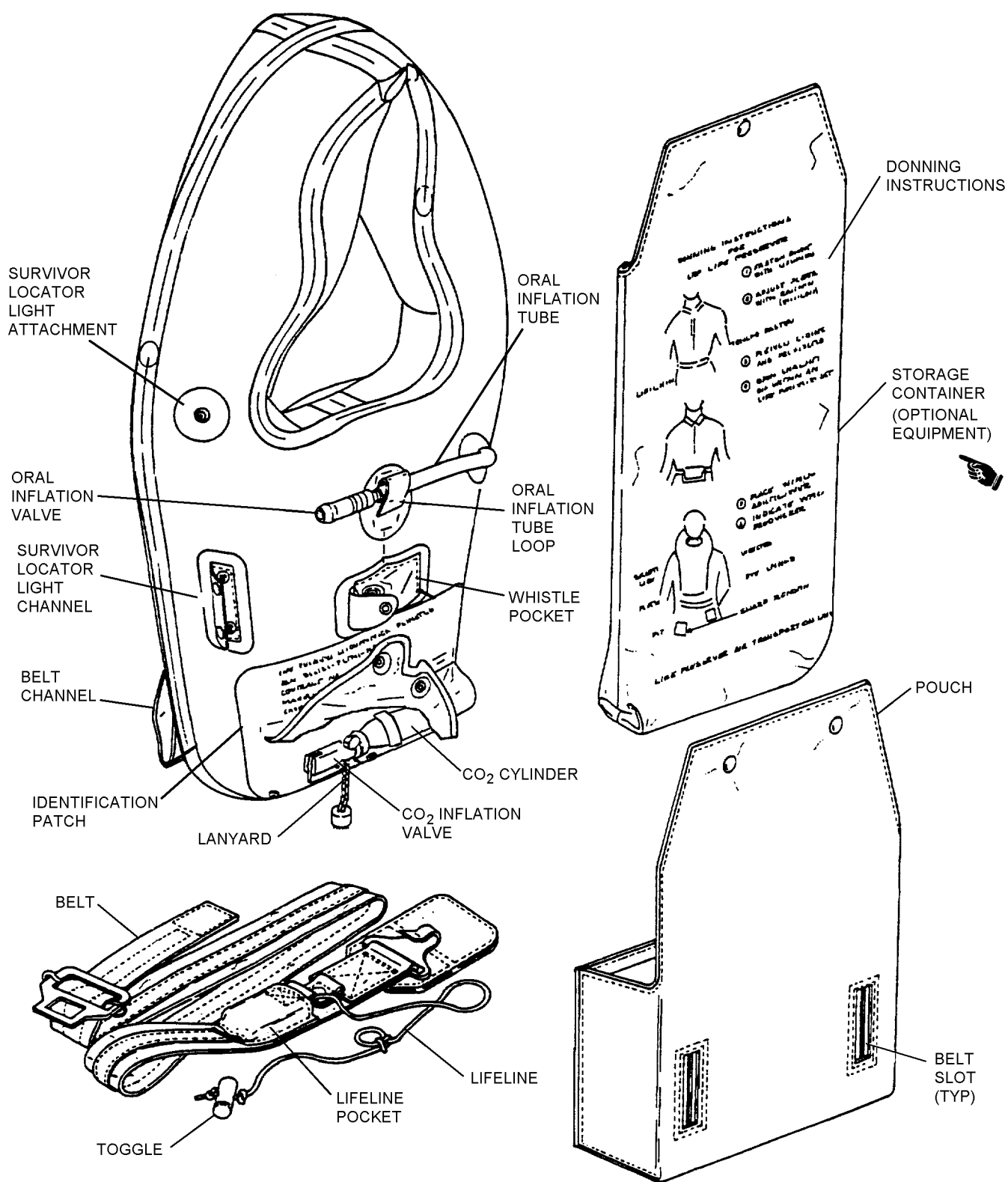


Figure 20-1. LPP-1 and -1A Life Preserver Assemblies

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20-6. The pouch and belt assembly consists of a rubber-coated nylon cloth pouch and an adjustable belt. The pouch contains the flotation assembly and survival items. The belt consists of a 53-inch piece of webbing, an adjustable buckle and clasp, a toggle assembly and a toggle assembly pocket. The belt adjusts from a waist size of 30 to 52 inches and attaches the flotation assembly and pouch to the wearer by means of the belt loop on the flotation assembly and the slots in the back of the pouch. The toggle assembly consists of a wooden toggle and line and is used to secure survivors together while they are in the water. When not in use, the toggle line is around the wooden toggle and stowed in a pocket located on the belt. See figure 20-1.

20-7. The LPP-1 inflation assembly consists of a Type I (MIL-C-25369), 25- to 28-gram CO₂ cylinder and an inflation valve (SAF-T-PAK). The LPP-1A inflation assembly consists of a Type II (MIL-C-25369), 28- to 31-gram CO₂ cylinder and an inflation valve (MIL-I-25370). The inflation assembly is connected to the valve stem on the front of the flotation assembly. The valve stem is equipped with a check valve which prevents leakage.

20-8. The storage container is used to store the life preserver assembly when it is not in use. It also has donning instructions printed on it. The storage container is considered optional equipment.

20-9. APPLICATION.

20-10. The LPP-1 and LPP-1A life preserver assemblies are used by passengers in transport or cargo aircraft, rotary or fixed wing. The LPU-32/P is an authorized substitute for the LPP-1, -1A life preserver assembly.

20-11. FUNCTION.

20-12. The LPP-1, -1A is manually inflated by pulling the inflation assembly lanyard down. Emergency use of the survival items shall be as required. In an emergency situation, the oral inflation valve should be used to top-off an inflated preserver, maintain inflation of a leaky preserver or to inflate a preserver when the inflation assembly malfunctions or fails. The oral inflation valve is also used to inflate a preserver with air during an inspection test and to deflate a preserver in preparation for packing.

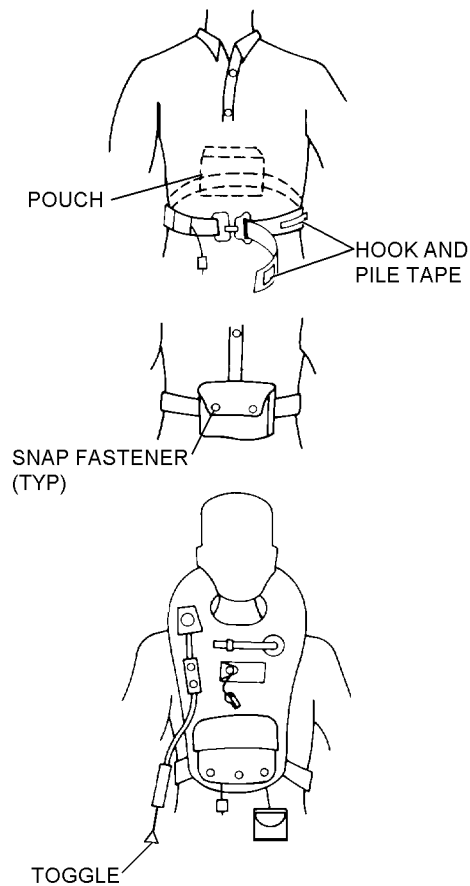
20-13. DONNING PROCEDURE.

20-14. To don the LPP-1, -1A life preserver, refer to figure 20-2.

NOTE

The pouch must be opened and the flotation assembly unrolled prior to inflation through the oral inflation valve or via the carbon dioxide inflation assembly.

DONNING INSTRUCTIONS FOR LPP-1, -1A LIFE PRESERVERS



1. REMOVE PRESERVER FROM STORAGE CONTAINER.
2. FASTEN BELT ADAPTERS IN FRONT WITH POUCH IN REAR.
3. ADJUST BELT TO SIZE. SECURE EXCESS BELT BY MATING HOOK AND PILE TAPE.
4. ROTATE POUCH TO FRONT AND READJUST BELT.
5. OPEN SNAP FASTENERS ON POUCH AND UNFOLD LIFE PRESERVER.
6. PLACE DEFLATED PRESERVER OVERHEAD.
7. PLACE THIS STORAGE CONTAINER INTO POUCH AFTER DONNING LIFE PRESERVER.
8. LIFT LOWER END OF PRESERVER OUT OF POUCH.
9. INFLATE PRESERVER BY PULLING TOGGLE DOWN.

Figure 20-2. Donning Procedure

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Section 20-2. Modifications

20-15. GENERAL.

20-16. There are no authorized modifications to the LPP-1, -1A life preserver at this time. Common repairs and fabrication instructions to maintain serviceability can be found in [table 20-2](#).

Table 20-2. LPP-1 or -1A Common Repairs and Fabrications

Description of Repair or Fabrication	Paragraph Number
Determination of Repairability	20-51
Cementing Life Preserver	20-52
Patching Life Preserver	20-53
Replacement of Oral Inflation Valve	20-55
Recementing of LPP-1, -1A Bladder Seams	20-56
Replacement of LPP-1 Lanyard Cord	20-57
Replacement of LPP-1A Lanyard Cord	20-58
Replacement of Defective Plastic Snap Fasteners with Metal Snap Fasteners	20-59
Fabrication of Survivor's Light Attachment Pocket	20-60
Repair of Corroded CO ₂ Valve	20-61
Replacement of Top and Bottom Gaskets	20-62
Replacement of Check Valve Assembly	20-63
Fabrication of Lifeline and Toggle Assembly	20-64

Section 20-3. Maintenance

20-17. GENERAL.

20-18. This section contains information on inspection, disassembly, repair/replacement, testing, and re-assembly of the LPP-1, -1A life preserver.

20-19. INSPECTION.

20-20. All life preservers shall be subjected to Preflight, Special and Calendar/Phase Inspections.

20-21. The Preflight Inspection shall be performed on life preservers prior to each flight by the aircrew-member to whom the life preserver is assigned. The Preflight Inspection shall be performed on life preservers installed in aircraft prior to each flight by assigned aircrewmembers.

20-22. The Special Inspection shall be performed on all aircraft installed life preservers at intervals not to exceed 30 days. The inspection shall be performed at the organizational level of maintenance by personnel assigned to the Aviator's Equipment Branch.

20-23. Upon completion of the inspection, make necessary entries on the appropriate form in accordance with OPNAVINST 4790.2 Series. The 30-Day Special Inspection may be recorded on a separate history card from the history card recording Calendar/Phase Inspections, functional checks, and modifications.

20-24. The Calendar/Phase Inspection shall be performed on all life preservers prior to placing in service. The Inspection cycle thereafter shall be as follows: personal issue life preservers shall be inspected once every 90 days. Aircraft-installed life preserver inspection shall coincide with the inspection cycle of the aircraft in which installed. See applicable Planned Maintenance System (PMS) publications for specific intervals. In no case shall the interval exceed 231 days. Unless operational requirements demand otherwise, the life preserver Calendar/Phase Inspection shall be performed by the intermediate level of maintenance or above. The functional test shall be performed prior to placing in service, every fourth inspection cycle thereafter, and whenever an inflation assembly is replaced. The leakage test shall be performed during every inspection cycle. If inspection indicates damage, complete appropriate forms in accordance with OPNAVINST 4790.2 Series and forward entire assembly to supply. Refer to [paragraph 20-51](#) for determination of repairability.

20-25. QUALITY ASSURANCE. Properly detailed procedures present a logical sequence for the inspection process. The more critical procedures are underlined to designate steps which require a Quality Assurance inspection to assure performance of specific requirements. After the underlined step is performed by the Aircrew Survival Equipmentman, the procedure shall be verified before the next step is performed. This verification shall be performed by a Collateral Duty Inspector or Quality Assurance Representative (CDI, CDQAR, or QAR). Work Center supervisors are primarily responsible for quality assurance within their centers. OPNAVINST 4790.2 Series permits supervisors to nominate their more experienced personnel to serve as quality assurance inspectors. Nominated personnel shall be screened and examined by the Quality Assurance Officer prior to their designation as Quality Assurance Inspectors or Quality Assurance Representatives by the Commanding Officer. Under no circumstances shall an Aircrew Survival Equipmentman perform his own quality assurance inspection.

20-26. PREFLIGHT/SPECIAL INSPECTION. To perform a Preflight/Special Inspection, proceed as follows:

WARNING

Ensure that the inflation pull toggle is readily accessible. The pull toggle shall extend from the protective cover flap.

CAUTION

Do not open any sealed or safety-wired/safety tied portions of preserver for Preflight/Special Inspection.

1. Inspect exposed metal parts for corrosion and damage.
2. Inspect inflation assembly for presence of safety wire and CO₂ cylinders.
3. Inspect seams and harness for wear, snags, tears and abrasions.
4. Inspect for presence, security of attachment and, if applicable, operation.
5. If any discrepancy is noted, the preserver shall be removed from service and repaired in accordance with procedures in this volume.

20-27. ACCEPTANCE/CALENDAR/PHASE INSPECTION. The Acceptance/Calendar/Phase Inspection consists of the following tasks:

1. Inflation Pull Toggle Inspection
2. Case, Container/Pouch Inspection
3. Functional Test (every fourth inspection cycle)
4. Visual Inspection
5. Life Preserver Configuration
6. General Inspection
7. Markings Inspection
8. Survival Items Inspection
9. Inflation Assembly Inspection

10. Inflation Lanyard Inspection

11. Leakage Test

12. Records Updating

20-28. INFLATION PULL TOGGLE INSPECTION.

Inspect inflation pull toggle for the following:

1. Attachment of inflation lanyard to toggle.
2. Cuts, tears, deterioration, abrasion, stains, and general cleanliness of inflation lanyard.
3. Cracked or broken pull toggle.

20-29. CASE, CONTAINER/POUCH INSPECTION.

To inspect cases, containers, and/or pouches, proceed as follows:

1. Inspect fabric for cuts, tears, deterioration, abrasion, stains, and general cleanliness.
2. Inspect seams for proper adhesion or stitching.
3. Inspect straps and loops for security and wear.
4. Inspect any other parts for wear, damage, and security.
5. All hardware for security of attachment, corrosion, damage, wear and, if applicable, ease of operation.
6. Inspect snap fastener assemblies for presence, security of attachment, ease of operation, corrosion, and wear.

NOTE

All uni-directional snap fasteners shall be installed with the dot on the button of the snap fastener socket positioned on the side of the snap fastener to which lift must be applied to disengage the socket from the snap fastener stud.

7. If any discrepancies are found, the case, container, or pouch shall be repaired or removed from service as deemed appropriate by the inspection activity.

20-30. FUNCTIONAL TEST. To perform a functional test, proceed as follows:



Ensure area surrounding preserver is free of foreign objects.

1. Open pouch and unroll flotation assembly.
2. Actuate inflation assembly.
3. The preserver shall fully inflate to design shape, without evidence of restriction, in less than 30 seconds.
4. If preserver does not properly inflate, determine cause. Ensure stem and valve are clean and free of foreign matter.
5. If correction is made, the preserver shall be functionally tested again.
6. Deflate preserver in accordance with [paragraph 20-31](#) to remove all CO₂.

20-31. DEFLATION. To deflate a life preserver, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Pump, Rotary Vacuum (or equivalent)	NIIN 00-052-5015 (90567)
As Required	Hose, 3/8- or 1/2-inch Inside Diameter Rubber	—

1. Attach one end of rubber hose to vacuum pump.
2. Deflate through oral inflation valves. Unlock oral inflation valve, hold in open position, and hold vacuum pump hose against end of oral inflation valve. When compartment is collapsed, release oral inflation valve. Screw lock closed.

20-32. VISUAL INSPECTION. Prior to visually inspecting a life preserver assembly, the life preserver shall be inflated with air to 1.0 psig.



Remove all carbon dioxide cylinders prior to inflating life preserver with air.

NOTE

If suitable air source is not available, water-pumped nitrogen (BB-N-411) may be substituted.

20-33. LIFE PRESERVER CONFIGURATION.

The life preserver shall be configured by comparing it to figure 20-1 and Section 20-4.

20-34. GENERAL INSPECTION. Examine life preservers for the following:

- 1. Preserver fabric for cuts, tears, punctures, deterioration and abrasion. Refer to paragraph 20-53 for repair instructions.
- 2. Seam tapes for proper adhesion. Refer to paragraph 20-56 for repair instructions.
- 3. Valve inlet stems for security.
- 4. Oral inflation valve(s) for cracks, security, ease of operation, and corrosion.
- 5. Patches for proper adhesion and wear. Refer to paragraph 20-53 for repair instructions.
- 6. Any other parts for wear or other damage.
- 7. All hardware for security of attachment, corrosion, damage, wear and, if applicable, ease of operation.
- 8. Preservers for stains, dirt, and general cleanliness. Refer to paragraph 20-43 for cleaning instructions.
- 9. Cross threading and/or loose manifold nuts.

20-35. MARKINGS INSPECTION. To inspect and restore marking, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Ink, Marking, Laundry, Black	SPE-92 NIIN 00-161-4229
	-or-	
As Required	Ink, Drawing, Waterproof, Yellow	A-A-59291 NIIN 00-634-6583

NOTE

Storage container assemblies P/N 36D1340-1 and 68A94D11-1 are optional equipment and may not be available for markings inspection.

- 1. Compare markings on preserver to those listed in table 20-3 or 20-4.
- 2. Restore any faded markings.
- 3. Deleted.
- 4. Correct any markings which do not agree with the applicable table. Paint out old marking and enter new marking as close to proper position as possible.

20-36. SURVIVAL ITEMS INSPECTION. To inspect survival items, proceed as follows:

- 1. Inventory all items by checking items against table 20-1.

NOTE

NAVAIR 13-1-6.5, Rescue and Survival Equipment contains detailed information on the inspection of survival items.

- 2. Inspect all items for damage, spent contents and expired service life. Replace as necessary.

NOTE

Do not attempt to replace bulb or battery of salt water activated lights on LPP-1, 1A life preservers. Replace entire assembly. Replacement parts are not stocked.

- 3. Operate all items which are not intended for one-time use. Replace as necessary.

Table 20-3. LPP-1 Life Preserver Markings

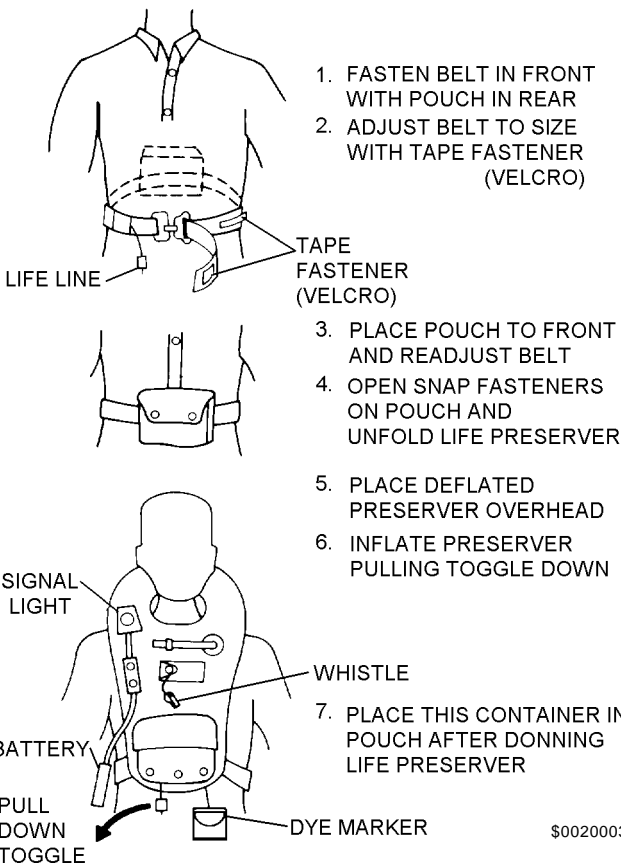
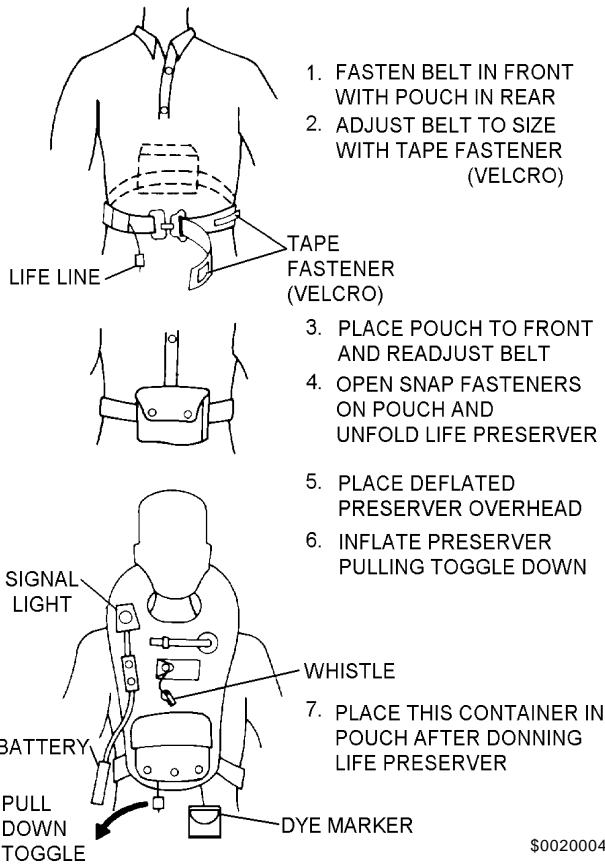
Marking (Note 1)	Location	Letter Height
<p>DONNING INSTRUCTIONS FOR LPP-1 LIFE PRESERVER</p>  <ol style="list-style-type: none"> 1. FASTEN BELT IN FRONT WITH POUCH IN REAR 2. ADJUST BELT TO SIZE WITH TAPE FASTENER (VELCRO) 3. PLACE POUCH TO FRONT AND READJUST BELT 4. OPEN SNAP FASTENERS ON POUCH AND UNFOLD LIFE PRESERVER 5. PLACE DEFLATED PRESERVER OVERHEAD 6. INFLATE PRESERVER PULLING TOGGLE DOWN 7. PLACE THIS CONTAINER IN POUCH AFTER DONNING LIFE PRESERVER <p>\$0020003</p>	Front of storage container	<p>1/4 inch</p> <p>1/8 inch</p>
<p>LIFE PRESERVER, PASSENGER,</p> <p>AIR TRANSPORT TYPE LPP-1</p> <p>STOCK NO. [applicable number]</p> <p>STOCK NO. [applicable number]</p> <p>MANUFACTURER [name of manufacturer]</p> <p>SERIAL NO. [applicable number]</p>	Front of storage container	1/4 inch
<p>LIFE PRESERVER, PASSENGER,</p> <p>AIR TRANSPORT TYPE LPP-1A</p> <p>FSN: [applicable number]</p> <p>SERIAL NO. [applicable number]</p>	Front of flotation tube below whistle pocket	3/8 inch container
<p>Note: Replacement markings shall be stamped or stenciled using waterproof black ink.</p>		

Table 20-4. LPP-1A Life Preserver Markings

Marking (Note 1)	Location	Letter Height
<p>DONNING INSTRUCTIONS FOR LPP-1A LIFE PRESERVER</p>  <ol style="list-style-type: none"> 1. FASTEN BELT IN FRONT WITH POUCH IN REAR 2. ADJUST BELT TO SIZE WITH TAPE FASTENER (VELCRO) 3. PLACE POUCH TO FRONT AND READJUST BELT 4. OPEN SNAP FASTENERS ON POUCH AND UNFOLD LIFE PRESERVER 5. PLACE DEFLATED PRESERVER OVERHEAD 6. INFLATE PRESERVER PULLING TOGGLE DOWN 7. PLACE THIS CONTAINER IN POUCH AFTER DONNING LIFE PRESERVER <p>Labels: LIFE LINE, TAPE FASTENER (VELCRO), SIGNAL LIGHT, WHISTLE, BATTERY, PULL DOWN TOGGLE, DYE MARKER</p> <p>\$0020004</p>	Front of storage container	<p>1/4 inch</p> <p>1/8 inch</p>
<p>LIFE PRESERVER, INFLATABLE, UTILITY TYPE, LPP-1A NSN: 1R4220-00-089-7620LX CONTRACT NO. [applicable number] MANUFACTURER [name of manufacturer] SERIAL NO. [applicable number] DATE OF MANUFACTURE [month and year]</p>	Front of flotation tube below whistle pocket	3/8 inch
<p>LIFE PRESERVER, PASSENGER, AIR TRANSPORT TYPE LPP-1A</p>	Front of storage	1/4 inch container
Notes: 1. Replacement markings shall be stamped or stenciled using waterproof black ink.		

20-37. INFLATION ASSEMBLY INSPECTION. To inspect life preserver inflation assemblies, proceed as follows:

1. Remove CO₂ cylinders from valve assembly.
2. Examine inflation device, actuating lever and lanyard, and locking pins for fraying, corrosion, stripped threads, and other damage.
3. If required, remove any sharp edges from valve with a fine file.
4. Operate actuating lever several times to ensure that lever moves freely and that piercing pin moves properly inside valve body. Inspect point of piercing pin for serviceability. If point is flat, rounded, dull, or otherwise worn or damaged, replace inflation assembly.

NOTE

Each time inflation assembly gaskets or inflation assembly is removed and replaced for any reason, a functional test shall be conducted. Refer to [paragraph 20-30](#). Use new gaskets when replacing device.

5. If any discrepancy is noted in device that is not repairable in accordance with [paragraph 20-51](#), remove assembly and install a new inflation device.

6. Reinstall CO₂ cylinder. See [paragraph 20-46](#).

20-38. INFLATION LANYARD INSPECTION. To inspect the inflation lanyard, proceed as follows:

1. Examine inflation lanyard for frays, ruptures, thin spots, split casing, and security of knots.
2. Replace unsatisfactory inflation lanyard. Refer to [paragraph 20-57](#) or [20-58](#).
3. Safety-wire inflation assembly as needed in accordance with [paragraph 20-47](#).

20-39. LEAKAGE TEST. All life preservers shall be subjected to a leakage test each Calendar/Phase Inspection. To perform a leakage test proceed in accordance with [paragraph 20-41](#).

20-40. Test Fixture. A suggested test fixture, consisting of a three-way valve, pressure gage, and adapters for compartments being tested, is shown in [Chapter 3](#). Test fixtures must be fabricated to meet the requirements of the schematic shown in [figure 20-3](#).

20-41. Test Procedure. To test life preservers, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Test Fixture (or equivalent)	See Chapter 3

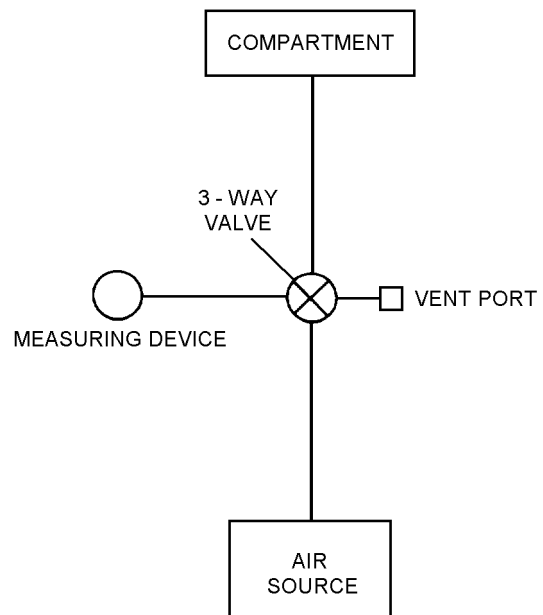


Figure 20-3. Test Fixture Schematic

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NAVAIR 13-1-6.1-2

CAUTION

Ensure test area is free of foreign objects.

1. Ensure all carbon dioxide has been removed from any preserver which has been functionally tested.

CAUTION

If 3-way valve is not used, measuring device valve must be closed when air feed valve is open.

Damage may occur to oral inflation valve if air supply pressure entering the life preserver exceeds ten (10) psi during this test.

NOTE

If a suitable air source is not available, water-pumped nitrogen (BB-N-411) may be substituted.

2. Unlock oral inflation valve and insert into rubber hose. Rotate valve to air supply position and inflate chamber. Alternately position valve between measuring device, vent and air supply until proper pressure of 2.0 psig is attained.

3. The air supply shall be securely shut off and after a minimum of 15 minutes, the test pressure of the single chamber shall be readjusted, if necessary to the leakage test pressure. Record time.

4. Disconnect air supply and check for leaks. Ensure all valves are closed.

5. Record temperature and barometric pressure.

6. After a minimum of 4 hours after completing step 3, record test pressure of single chamber. Test pressure shall not decrease to less than 1.6 psig for a life preserver chamber, from a maximum test pressure of 2.0 psig.

7. Record temperature and barometric pressure and correct test pressure for any changes in temperature

and barometric pressure. Refer to [tables 20-5](#) and [20-6](#).

EXAMPLE

UNCORRECTED TEST READING 1.70 PSI

	TEMP.	BARO.
START	75° F	29.90 IN. Hg
END	70° F	29.70 IN. Hg
DIFFERENCE	- 5° F	-0.20
CORRECTION	+0.155	-0.098

TEMP. CORRECTION	+ 0.155
+ BARO. CORRECTION	- 0.098
CORRECTION	+ 0.057

UNCORRECTED READING	1.700 PSI
+ CORRECTION	+ 0.057
CORRECTED READING	1.757 PSI

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Step 7 - Para 20-41

Table 20-5. Temperature Conversion Chart

Temperature Difference (°F)	Correction (psi)
1	0.031
2	0.062
3	0.093
4	0.124
5	0.155
6	0.186
7	0.217
8	0.248
9	0.279
10	0.310
Rise in temperature: subtract from gage reading. Fall in temperature: add to gage reading.	

8. If pressure of chamber is below 1.6 psig inflate to leakage test pressure and coat with a soap solution to locate leaks. Mark leak areas. Rinse preserver with fresh water, air dry and repair in accordance with [paragraph 20-52](#).

9. Deflate preserver in accordance with [paragraph 20-31](#).

Table 20-6. Barometric Pressure Conversion Chart

Press. Diff. (inHG)	Corr. (psi)	Press. Diff. (inHG)	Corr. (psi)	Press. Diff. (inHG)	Corr. (psi)	Press. Diff. (inHG)	Corr. (psi)	Press. Diff. (inHG)	Corr. (psi)
0.01	0.005	0.16	0.078	0.31	0.152	0.46	0.225	0.61	0.299
0.02	0.010	0.17	0.083	0.32	0.157	0.47	0.230	0.62	0.304
0.03	0.015	0.18	0.088	0.33	0.162	0.48	0.235	0.63	0.309
0.04	0.020	0.19	0.093	0.34	0.167	0.49	0.240	0.64	0.314
0.05	0.025	0.20	0.098	0.35	0.172	0.50	0.245	0.65	0.319
0.06	0.030	0.21	0.103	0.36	0.176	0.51	0.250	0.66	0.323
0.07	0.035	0.22	0.108	0.37	0.181	0.52	0.254	0.67	0.328
0.08	0.040	0.23	0.113	0.38	0.186	0.53	0.260	0.68	0.333
0.09	0.045	0.24	0.118	0.39	0.191	0.54	0.265	0.69	0.338
0.10	0.049	0.25	0.123	0.40	0.196	0.55	0.270	0.70	0.343
0.11	0.054	0.26	0.127	0.41	0.201	0.56	0.275	0.71	0.348
0.12	0.060	0.27	0.132	0.42	0.206	0.57	0.279	0.72	0.353
0.13	0.064	0.28	0.137	0.43	0.211	0.58	0.284	0.73	0.358
0.14	0.069	0.29	0.142	0.44	0.216	0.59	0.289	0.74	0.363
0.15	0.073	0.30	0.147	0.45	0.221	0.60	0.294	0.75	0.368
Rise in pressure: add to gage reading. Fall in pressure: subtract from gage reading.									

10. Ensure that inflation valve lever is cocked.
Install CO₂ cylinder in accordance with [paragraph 20-46](#).

20-42. RECORDS UPDATING. Make necessary entries on the appropriate form in accordance with OP-NAVINST 4790.2 Series.

20-43. CLEANING AND SERVICING.

20-44. Cleaning and servicing consist of cleaning the life preserver, case, container and/or pouch, installation of the inflation valve protective covers and CO₂ cylinders and, when required, safety wiring of the inflation valve actuating lever.

20-45. CLEANING OF LIFE PRESERVER CASINGS/BLADDERS. To clean life preservers, machine washing is preferred on casings, containers, and pouches. Alternate method is by hand. Remove any survival items and other detachable items and proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Detergent, General Purpose	MIL-D-16791 NIIN 00-282-9699
As Required	Cloth, Lint-Free, Type II	MIL-C-85043 NIIN 00-044-9281
As Required	Talc, Technical	MIL-T-50036A NIIN 01-080-9589



Solvents are not to be used in cleaning life preservers.

1. Prepare solution of detergent (MIL-D-16791) consisting of 1/4 to 1/2 ounce of detergent per gallon of water.

- 2. Apply cleaning solution to soiled area with a spray or sponge.
- 3. Allow solution to remain on surface for several minutes, then agitate with a soft brush or rag.
- 4. Rinse surface thoroughly with water; wipe with a cloth or sponge. Repeat this application until surface is free from all solution.
- 5. Dry casing before use and dry bladder with a lint-free cloth (MIL-C-85043). Apply a light coating of talc (MIL-T-50036A).

20-46. INSTALLATION OF CO₂ CYLINDER. To install CO₂ cylinder, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Scale (Gram)	A-A-52021-1 NIIN 00-514-4117 or equivalent
1	Die, Cylinder Thread Chaser	1842-008-01 (CAGE 03688) NIIN 00-069-4040

Materials Required

Quantity	Description	Reference Number
1	Valve Stem and Seat Seal Kit (Noted)	105AS100-5 (CAGE 30003) NIIN 00-498-6964

Notes: 1. Seat Seal is obtained from Valve Stem and Seat Seal Kit, P/N 105AS100-5, NIIN 00-498-6964, which contains two top, two bottom, and two seat seal gaskets.

NOTE

Weight of charged cylinder will vary according to manufacturer.

- 1. Weigh a charged cylinder and compare the minimum stamped weight with the scale weight. Discard and replace cylinder if scale weight is 2 grams less than minimum stamped weight.
- 2. The proper configuration of the life preserver inflation assembly is as follows:
 - a. For the LPP-1, use one SAF-T-PAK inflator with one MIL-C-25369 Type I CO₂ cylinder, 25 to 28 grams, NIIN 00-372-0585.

NOTE

The SAF-T-PAK inflation assembly is no longer carried by supply. Use until no longer

serviceable and replace with MIL-L-25370 Type II inflator and MIL-C-25369 Type CO₂ cylinder.

- b. For the LPP-1A, use one MIL-L-25370 Type II inflator with one MIL-C-25369 Type II CO₂ cylinder, 28 to 31 grams, NIIN 00-543-6693.

3. Ensure that inflator lever is in a cocked position.

4. To assure a firm cylinder seat, conduct a cylinder thread count. Threaded portion of cylinder neck shall contain a minimum of seven full threads to assure a firm cylinder seat within valve body. Any cylinder found with less than seven full threads shall be discarded. See figure 20-4.



Steel threads on CO₂ cylinder can cause damage to aluminum threads on inflator if cylinder is not carefully threaded. If binding occurs during installation of cylinder, use thread chaser dye on cylinder thread to cut free excessive plating. Reinstall cylinder. If binding still occurs, replace cylinder.

5. After performing functional test, insert a new seat seal gasket. At intermediate inspection intervals, inspect condition of gasket and replace if necessary.

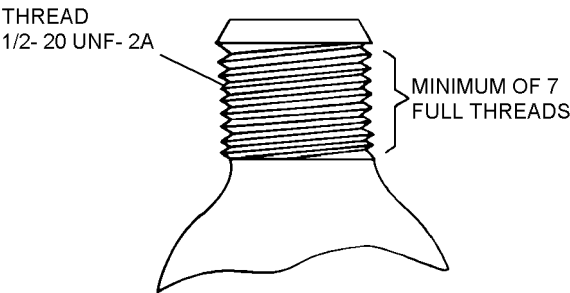
6. Install CO₂ cylinder into inflator body as far as hand twisting will permit.

NOTE

When replacing CO₂ cylinder to inflator, ensure that CO₂ cylinder passes through the holding patch loop.

7. Safety-wire inflator as required in accordance with paragraph 20-47.

8. Close inflation valve protective covers and secure with snap fasteners.



10200004

Figure 20-4. Cylinder Thread Count

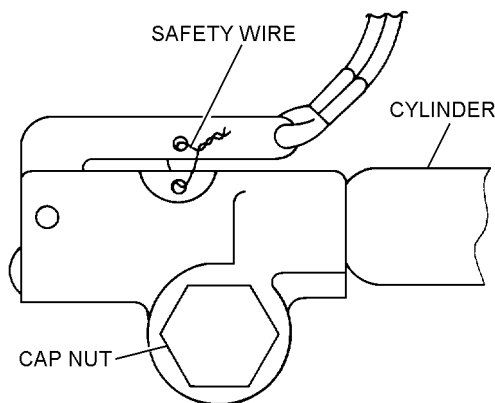
20-47. SAFETY-WIRING. To safety-wire the inflation assembly, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Copper Wire, Uncoated, Type S, 0.0159-inch Diameter	QQ-W-343 NIIN 00-236-9501

1. Pass a single strand of uncoated 0.0159-inch Type S copper wire through hole in inflation assembly body and through hole in actuation lever.

2. Twist the wire a minimum of four times and trim the excess.



T0047002

Step 2 - Para 20-47

20-48. REPAIR/REPLACEMENT.

20-49. This section contains instructions for the repair of various components or subassemblies of life preservers to ensure that appropriate items of equipment remain in Ready For Issue (RFI) status. Reference numbers for parts which are defective, corroded or worn and require replacement are included in the applicable paragraph of this section. Other replacement parts, such as carrying cases and personal survival equipment, are listed in the applicable table.

20-50. Replacement of easily removed assembly components such as CO₂ inflation valves and survival items, are authorized in addition to repair and replacement procedures documented in this section. The life preserver shall be subjected a functional and leakage test each time

CO₂ inflation valves are removed and replaced for any reason, and each time inflation valve gaskets are replaced.

20-51. DETERMINATION OF REPAIRABILITY.

Patching of holes, cuts, tears or punctures 1-inch square or less are the only repairs authorized in a life preserver bladder. Life preserver shall be considered beyond repair for any of the following reasons:

1. Porous fabric areas on flotation bladder.
2. Split or open bladder seams.
3. Leakage test failure resulting from other than repairable cut, tear or puncture.
4. Holes, cuts, tears or punctures within 1-inch of flotation bladder seams.
5. Deterioration of the polychloroprene-coated fabric caused by oil, grease, or any other foreign substance.
6. Deterioration of the polychloroprene fabric caused by a heavily mildewed condition.

20-52. CEMENTING LIFE PRESERVERS. Cementing of life preservers shall performed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Roller, Wooden	GGG-R-00620 NIIN 00-243-9401

NOTE

Toluene shall be the primary solvent used in the fabrication or repair of this assembly. MEK may be used if toluene is not available. Always use solvents sparingly and wipe up excess solvents; do not allow to dry by evaporation.

Materials Required

Quantity	Description	Reference Number
1	Brush, Disposable	NIIN 00-514-2417

Materials Required

Quantity	Description	Reference Number
As Required	Toluene	TT-T-548 NIIN 00-281-2002
	-or-	
As Required	Methyl Ethyl Ketone (MEK)	TT-M-261 NIIN 00-281-2762
As Required	Cement, Class 3, Polychloroprene	MIL-A-5540 NIIN 00-142-9913
As Required	Talc, Technical	MIL-T-50036A NIIN 01-089-9589



Do not use toluene or MEK near open flame, heat or electrical sparks. Avoid prolonged contact with skin or breathing of fumes. Use only in a well ventilated area.



Use only Polychloroprene adhesives and Polychloroprene-coated cloth patches on Polychloroprene-coated LPP-1, -1A flotation assemblies.

NOTE

Toluene or MEK must be applied vigorously to life preserver material over three years old in order to reactivate the material prior to cementing. Pigment from the material coloring staining a cloth rubbed over the treated surface will indicate the material has been reactivated. Cement shall be applied immediately after the surface has dried.

1. Clean both surfaces to be cemented with four applications of toluene or MEK. Apply toluene or MEK with back-and-forth strokes on the first and third applications, and one-way strokes on the second and fourth applications. Allow area to dry between applications.



The effective active period of adhesive mixture composed of polychloroprene and an accelerator is eight (8) hours. Do not use mixture if older than eight hours.

2. Prepare only enough mixture for 8 hours. Dispose of any remaining mixture.

3. Using a disposable brush, apply cement to completely cover surfaces to be cemented. Use long, one direction strokes and complete each surface before cement becomes tacky as the brush may pull tacky cement from the surface. Allow to dry for 10 minutes.

4. Apply a second coat of cement as in [step 3](#). Use brush strokes perpendicular to the original direction.

5. When second coat of cement has become tacky, place pieces together. If cemented area has a cut or tear, butt edges of damage before applying patch. Roll out bubbles with a wooden roller.

6. Allow cement to cure a minimum of 48 hours.

7. Dust area with talc (MIL-T-50036A).

20-53. PATCHING LIFE PRESERVERS. Patching of life preserver shall be performed as follows:

NOTE

Life preserver is not repairable if it has holes, cuts, tears, or punctures over one-inch square.

Materials Required

Quantity	Description	Reference Number
As Required	Cloth, Life Preserver, Type I, Orange	MIL-C-19002 NIIN 00-060-9136
	-or-	
	Cloth, Life Preserver, Type I, Yellow	MIL-C-19002 NIIN 00-935-6427

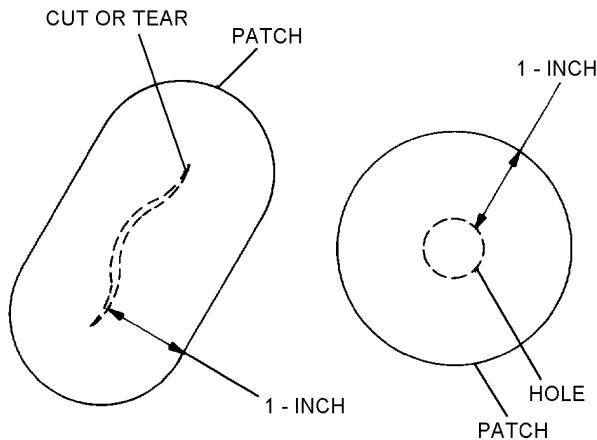


Use only Polychloroprene adhesive and Polychloroprene-coated cloth patches on Polychloroprene-coated LPP-1, -1A life preserver assemblies.

NOTE

Select patch color as near as possible to color of life preserver being repaired.

1. Cut a rounded patch 1 inch larger than damage on all sides.



Step 1 - Para 20-53

T0053001

2. Center patch over damage and trace an outline of patch on fabric.

3. Cement patch to damaged area in accordance with [paragraph 20-52](#).

4. Perform a leakage test.

20-54. INSPECTION RECORD PATCH.

NOTE

The 28th In-Service Management Panel meeting for Aviation Life Support Systems rescinded the requirement for the packer to sign the Inspection Record Patch on life preservers. The requirement for all other documentation remains unchanged. The reason for this change is that most history patches are unreadable and the packer's and inspector's names are documented on Aviation Crew Systems Records.

20-55. REPLACEMENT OF ORAL INFLATION VALVE. To replace the oral inflation valve, proceed as follows:

NOTE

Replacement of oral inflation valves can only be obtained through salvage of BCM'ed or surveyed inflatable survival equipment.

Materials Required

Quantity	Description	Reference Number
1	Valve, Oral Inflation	—
As Required	Cement, Polychloroprene	MIL-A-5540 NIIN 00-142-9913

Figure 20-5 Deleted.

Materials Required (Cont)

Quantity	Description	Reference Number
As Required	Brush, Disposable	NIIN 00-514-2417
As Required	Toluene	TT-T-548 NIIN 00-281-2002
	-or-	
As Required	Methyl Ethyl Ketone (MEK)	TT-M-261 NIIN 00-281-2762



Only toluene or MEK shall be used to clean oral inflation valve and tube. Only Polychloroprene cement (MIL-A-5540,

NIIN 00-142-9913) shall be used to cement oral inflation valve into oral inflation tube.

1. Carefully cut through metal clamp securing oral inflation valve to oral inflation tube, and remove metal band and oral inflation valve.
2. If the tip of the oral inflation tube was damaged during removal of valve, trim off damaged section.
3. Clean both surfaces to be cemented with toluene or MEK. Allow areas to dry.
4. Using a small disposable brush, carefully apply a small amount of Polychloroprene cement to the surfaces of the tube and the valve which are to be cemented together.
5. Immediately place oral inflation valve into oral inflation tube. Oral inflation valve should be inserted up to valve shoulder. Inspect for proper application/cement.

6. Tightly wrap the cemented portion of the oral inflation tube with cord or wire and allow to cure for 48 hours before removing wrap.

7. Perform leakage test in accordance with [paragraph 20-39](#).

20-56. RECEMENTING OF LPP-1, -1A BLADDER SEAMS. Recementing of seams is not authorized.



Recementing of the lap seam is not authorized for polychloroprene LPP-1 and LPP-1A life preservers.

NOTE

If bladder exhibits leakage from lap seam, bladder has ruptured. Dispose of life preserver after usable parts have been salvaged.

20-57. REPLACEMENT OF LPP-1 LANYARD CORD. To replace LPP-1 life preserver lanyard cord, proceed as follows:

Materials Required

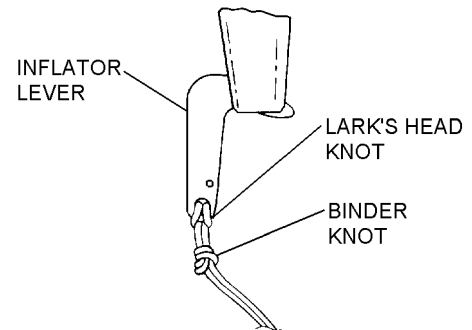
Quantity	Description	Reference Number
15 inches	Cord, Nylon, Type I (color optional)	MIL-C-5040 NIIN 00-014-6699

1. Carefully remove carbon dioxide cylinder from the inflator assembly.

2. If desired, remove nut and rubber gasket retaining the inflator and remove inflator and lanyard assembly.

3. Cut lanyard to be replaced and discard along with the two brass clips.

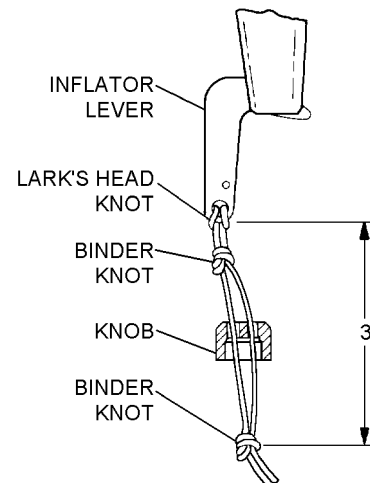
4. Fold the 15-inch length of cord in half, pass folded end through hole in end of inflator lever and tie the cord strands with a lark's head knot, followed by binder knot.



T0057004

Step 4 - Para 20-57

5. Thread the cord strands through the top of the knob (one strand through each hole) and tie a binder knot three inches from the lever end.



T0057005

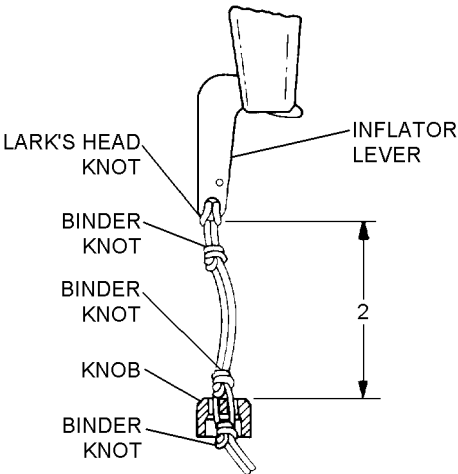
Step 5 - Para 20-57

NAVAIR 13-1-6.1-2

6. Slide knob down to single knot and tie a binder knot on the top of the knob to secure it in position.

NOTE

Ensure 2-inch length of lanyard exits from the end of the lever to the top of the knob.



Step 6 - Para 20-57

T0057006

7. Install inflator and gasket, nut and CO₂ cylinder.

20-58. REPLACEMENT OF LPP-1A LANYARD CORD. To replace LPP-1A life preserver lanyard cord, proceed as follows:

Materials Required

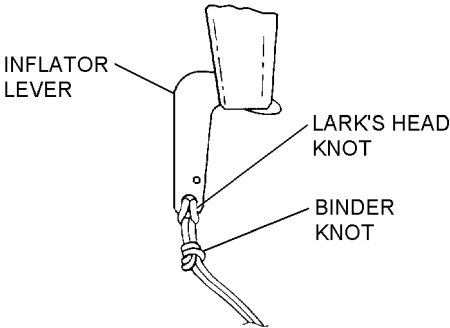
Quantity	Description	Reference Number
16 inches	Nylon, Type I (color optional)	MIL-C-5040 NIIN 00-014-6699

1. Carefully remove carbon dioxide cylinder from the inflator assembly.

2. If desired, remove nut and gasket retaining the inflator and remove inflator and lanyard assembly.

3. Cut lanyard to be replaced and discard along with the two brass clips.

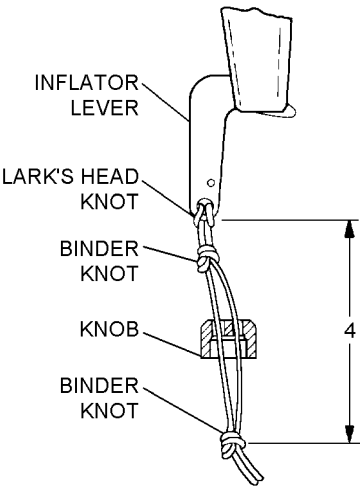
4. Fold the 16-inch length cord in half, pass folded end through hole in end of inflator lever and tie the cord strands with a lark's head knot, followed by a binder knot.



Step 4 - Para 20-58

T0058004

5. Thread the cord strands through the top of the knob (one strand through each hole) and tie a binder knot 4 inches from the lever end.



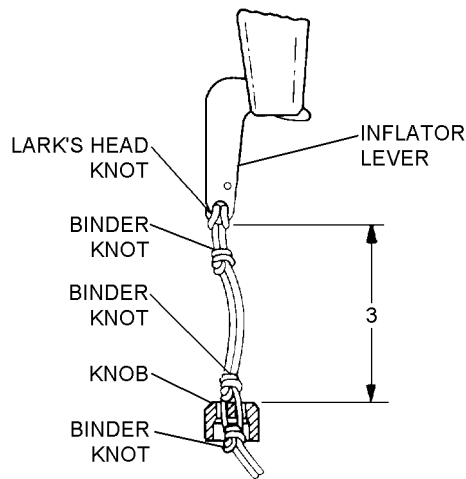
Step 5 - Para 20-58

T0058005

6. Slide knob down to single knot and tie a binder knot on the top of the knob to secure it in position.

NOTE

Ensure 3-inch length of lanyard exits from end of the lever to the top of the knob.



T0058006

Step 6 - Para 20-58

7. Install inflator and gasket, nut and CO₂ cylinder.

20-59. REPLACEMENT OF DEFECTIVE PLASTIC SNAP FASTENERS WITH METAL SNAP FASTENERS. To replace defective plastic snap fasteners, proceed as follows:

Materials Required

Quantity	Description	Reference Number
1	Cap, Snap Fastener	MS27981-1B NIIN 00-276-4954
1	Socket, Snap Fastener	MS27981-3B NIIN 00-276-4966
1	Stud, Snap Fastener	MS27981-4B NIIN 00-901-9660
2	Post, Snap Fastener	MS27981-5B NIIN 00-250-6858

NOTE

When replacing a defective snap fastener, the mating snap fastener must also be replaced.

1. Using end cutters, remove damaged plastic snap fastener stud and mating socket from eyelets and buttons.

2. Install new metal snap fasteners as necessary.

20-60. FABRICATION OF SURVIVOR'S LIGHT ATTACHMENT POCKET. To fabricate a survivor's light attachment pocket proceed as follows:

Materials Required

Quantity	Description	Reference Number
2 1/2 x 6 inches	Cloth, Nylon, Polychloroprene-coated, Type I	MIL-C-19002 NIIN 00-060-9136
1	Cap, Snap Fastener	MS27981-1B NIIN 00-276-4954
1	Socket, Snap Fastener	MS27981-3B NIIN 00-276-4966
As Required	Nylon Thread, Size E	V-T-295 NIIN 00-204-3884

1. Cut pattern as shown in figure 20-6, including opening for lamp and slot for battery cord.

2. Insert lamp in opening and battery through slot.

3. Fold cloth in half and sew as shown in figure 20-6 using 8 to 10 stitches per inch.

4. Install button and socket as shown in figure 20-6.

5. Make necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series.

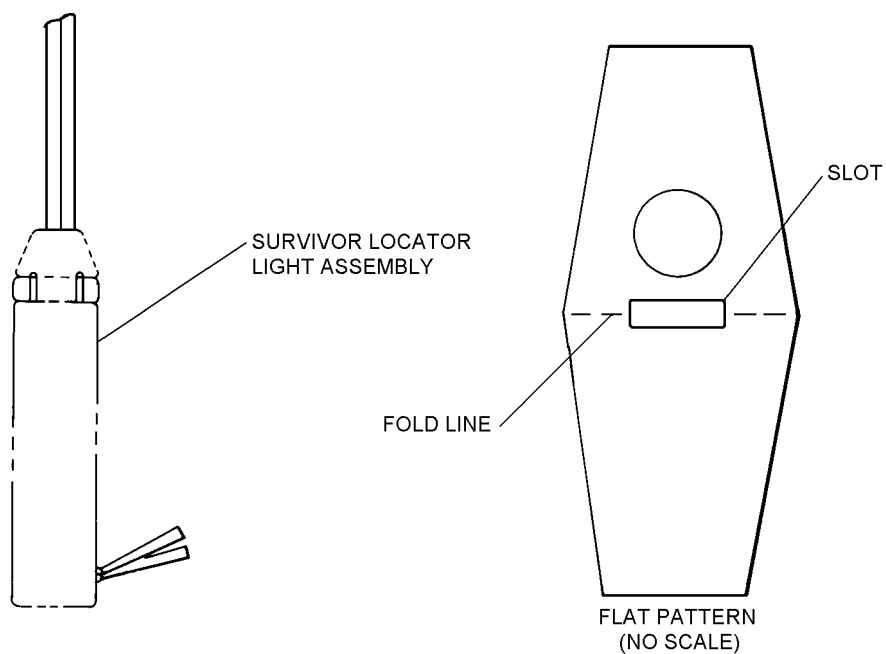
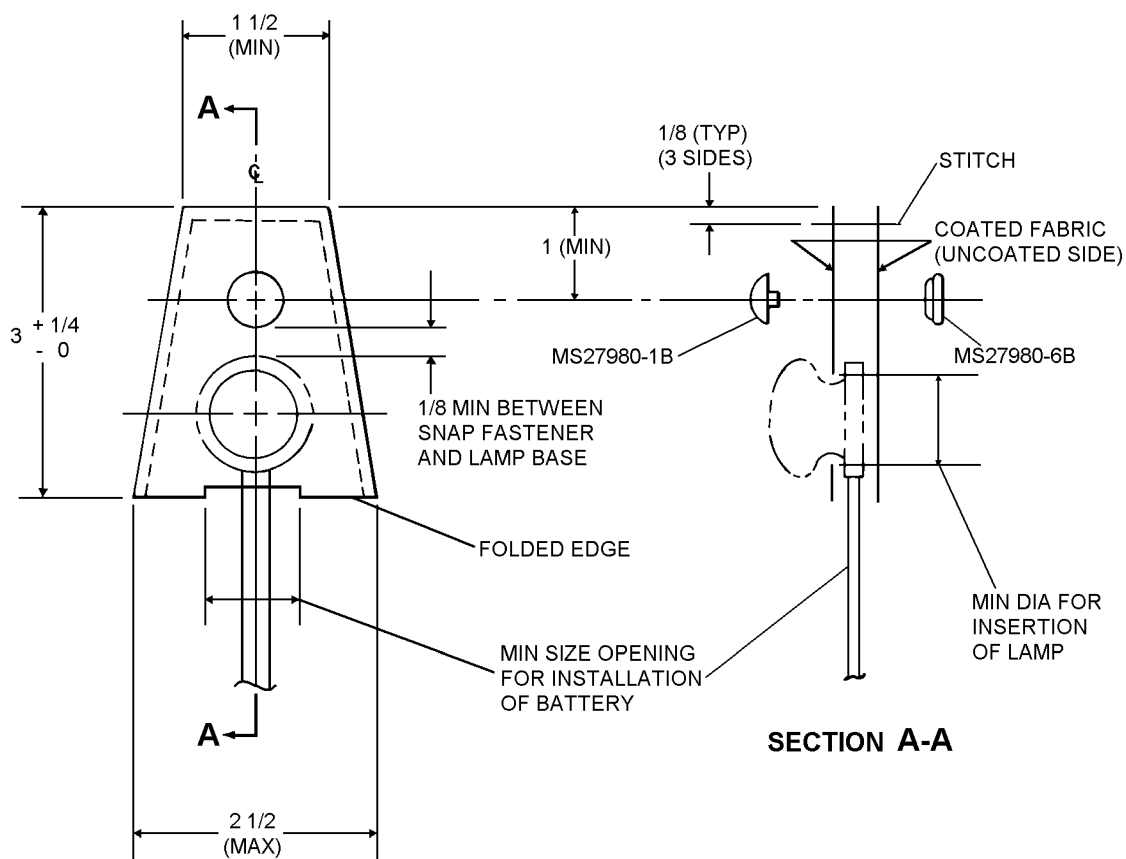


Figure 20-6. Fabrication of Attachment Pocket

10200006

20-61. REPAIR OF CORRODED CO₂ INFLATION VALVE MIL-L-25370, TYPE II. To repair CO₂ inflation valves on LPP-1 and LPP-1A, proceed as follows:

Materials Required		
Quantity	Description	Reference Number
As Required	Lubricant, Silicone	DC7 (CAGE 71984) NIIN 00-975-0712
1	Valve Stem and Seat Seal Kit (Note 1)	105AS100-5 (CAGE 30003) NIIN 00-498-6964
As Required	Cloth, Emery No. 240	—
1	Valve, Inflation	MIL-L-25370, Type II
As Required	Abrasive Mat	MIL-A-9962 NIIN 00-967-5093
As Required	Corrosion Preventive Compound (Amiguard) Type I	MIL-C-85054 NIIN 00-041-1596

Notes: 1. Valve Stem and Seat Seal Kit, P/N 105AS100-5, NIIN 00-498-6964, contains two top, two bottom, and two seat seal gaskets.

1. Remove CO₂ cylinder from valve and retain. Discard seat seal gasket.

2. Remove inflation valve from preserver. Discard two gaskets on valve stem.

3. Remove grooved taper pin (retaining lever) from inflation valve, using awl and mallet. See figure 20-7.

4. Remove lever, spring, and piercing pin. If spring is broken or corroded, replace entire valve.

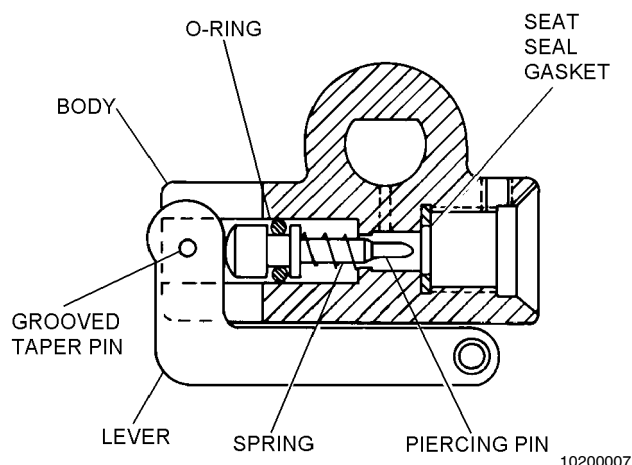


Figure 20-7. CO₂ Inflation Assembly

5. If piercing pin or actuating lever is corroded, remove corrosion with abrasive mat. If abrasive mat is ineffective, use 240 grit emery cloth. Do not damage O-ring on piercing pin. Wipe off any dirt or moisture from actuating lever and apply a thin coat of MIL-C-85054 and allow to dry.

6. Clean residue from actuating lever on piercing pin. Lightly coat base of piercing pin with silicone lubricant.

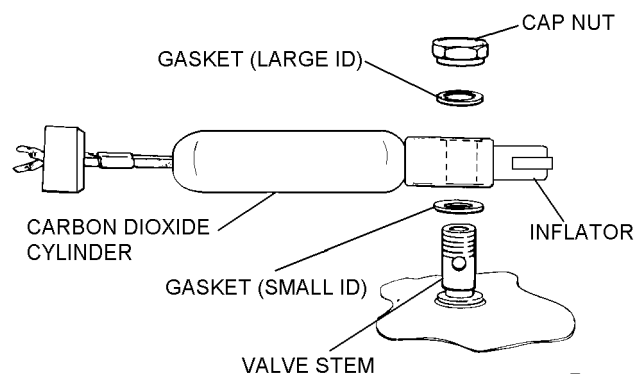
7. Reassemble inflation valve and operate actuating lever three or four times. Ensure that lever and piercing pin move freely.

8. If piercing pin and lever do not move freely, obtain replacement valve, MIL-L-25370, Type II.

9. Reinstall inflation valve on life preserver using new gaskets.

10. Install cap nut onto valve stem and torque to a value of 8 ± 1 in-lb.

11. Reinstall CO₂ cylinder using new seat seal gasket.



Step 11 - Para 20-61

20-62. REPLACEMENT OF TOP AND BOTTOM GASKETS. To replace the top and bottom gaskets on the inflator, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Wrench, 9/16-inch	—

Materials Required

Quantity	Description	Reference Number
1	Valve Stem and Seat Seal Kit (Note 1)	105AS100-5 (CAGE 30003) NIIN 00-498-6964

Notes: 1. Valve Stem and Seat Seal Kit, P/N 105AS100-5, NIIN 00-498-6964, contains two top, two bottom, and two seat seal gaskets.

1. Remove cap nut and top gasket from inflator.



Ensure that gaskets are properly positioned. The top gasket has a larger internal diameter than the bottom gasket.

2. Remove inflator and replace bottom gasket.
3. Carefully place inflator onto valve stem.
4. Install top gasket onto valve stem.
5. Tighten cap nut onto valve stem and torque to a value of 8 ± 1 in-lb.

6. Perform functional and leakage test on life preserver. Refer to paragraphs 20-30 and 20-39.

20-63. REPLACEMENT OF CHECK VALVE ASSEMBLY. To replace a defective check valve assembly, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Tool, Valve Core	8769A or equivalent (CAGE 27783) NIIN 01-354-5423
1	Wrench, Torque	—

Materials Required

Quantity	Description	Reference Number
1	Valve, Pneumatic Inflator (Check Valve Assembly) (Note 1)	Schrader-Bridgeport P/N 8457500047

Notes: 1. Schrader-Bridgeport P/N 8457500047 must be open purchased from:
Schrader-Bridgeport Intl
205 Frazier Rd
P.O. Box 668
Altivista, VA 24517
Phone (804) 369-8875

1. If not available, fabricate a valve core tool as shown in Chapter 3.

2. Remove inflator cap nut.

3. Insert valve core tool and unscrew check valve from valve stem.

4. Insert new check valve in valve stem and tighten with valve core tool hand tight.

5. Replace cap nut and torque to a value of 8 ± 1 in-lb.

6. Perform a functional and leakage test on life preserver. Refer to paragraphs 20-30 and 20-39.

20-64. REPAIR/FABRICATION OF LIFELINE AND TOGGLE ASSEMBLY. To repair or fabricate life line and toggle assembly, proceed as follows:

Support Equipment Required

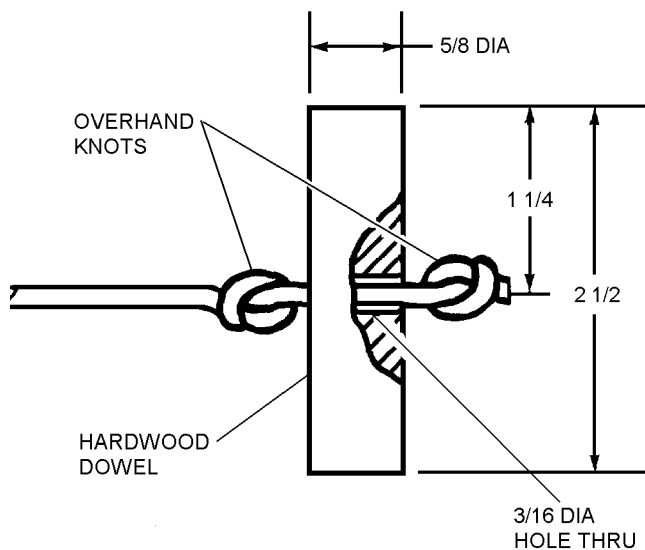
Quantity	Description	Reference Number
1	Dowel, hard wood 2 1/2-inch x 5/8-inch diameter	—
1	3/16-inch drill	—

Materials Required

Quantity	Description	Reference Number
36-inch length	Cord, Nylon, Type III	MIL-C-5040 NIIN 00-240-2146
As Required	Thread, Nylon Type II, Size E	V-T-295 NIIN 00-204-3884

1. Drill a 3/16-inch diameter hole in the center of a 2 1/2-inch x 5/8-inch diameter wooden dowel.

2. Pass one end of a 36-inch length of Type III nylon cord through the 3/16 inch diameter hole in center of wooden dowel. Secure cord with an overhand knot on each side of dowel.

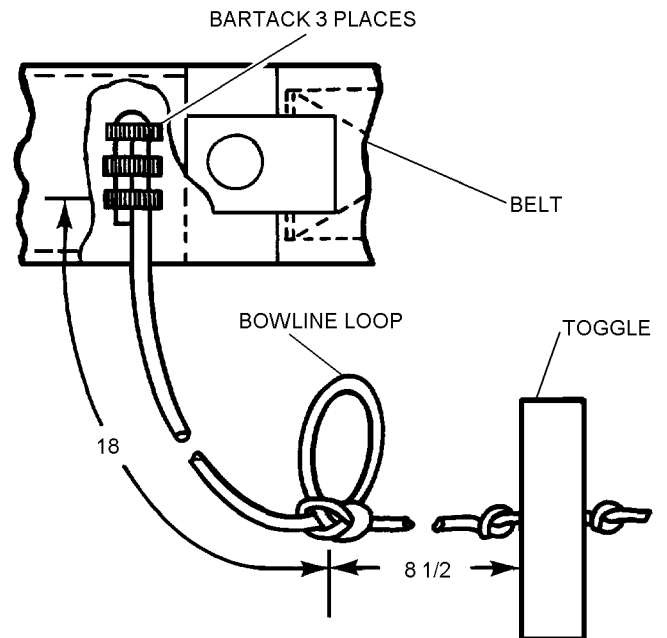


Step 2 - Para 20-64

T0064002

3. Place a 1 1/4-inch diameter bowline loop in nylon cord 8 1/2 inches from center of wooden dowel.

4. Attach free end of Type III nylon cord to belt using a bartack in three places.



T0064004

Step 4 - Para 20-64

20-65. PACKING PROCEDURE FOR LPP-1 AND -1A LIFE PRESERVER ASSEMBLY.

20-66. The LPP-1, -1A Life Preserver Assembly shall be packed by qualified personnel at the lowest level of maintenance possible. For cleaning and servicing refer to [paragraph 20-43](#).

20-67. To pack an LPP-1, -1A Life Preserver Assembly, proceed as follows:

1. Ensure that preserver, pouch, belt, and storage container have been inspected in accordance with [paragraph 20-29](#).

NOTE

NAVAIR 13-1-6.5 contains information on inspection and replacement of survival items.

2. Ensure that survival items have been inspected for expiration and damage. See [table 20-1](#) for items used.

NAVAIR 13-1-6.1-2

3. Ensure that belt is inserted through retaining channel on rear of preserver.

4. Lay preserver on a clean surface with inflation assembly facing up.

5. Insert ends of belt through slots in pouch.

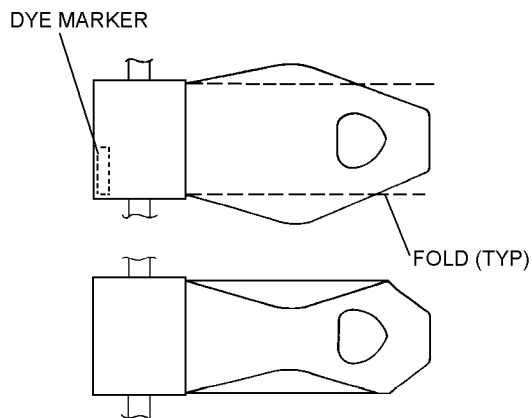
6. Ensure that each survival item is properly stowed or attached and flotation chamber completely deflated.

NOTE

The dye marker shall be tied to the belt and the whistle shall be tied to the whistle pocket. Each shall be secured with a 24 ± 2 -inch length of Type I nylon cord (MIL-C-5040). Use bowline knots only.

7. Position dye marker in bottom of pouch. Lock oral inflation valve, and then insert into tube loop.

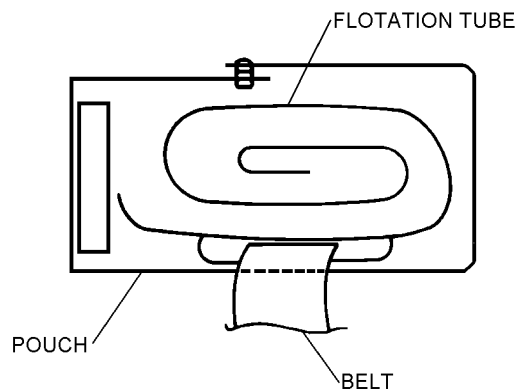
8. Fold flotation tube sides over to width of pouch.



Step 8 - Para 20-67

T0067008

9. Roll flotation tube into pouch and close pouch.



Step 9 - Para 20-67

T0067009

10. Insert packed preserver into storage container, if used. Use of storage containers is optional.

NOTE

Step 11 should be performed only after scheduled Calendar/Phase inspection or maintenance. This step is not performed when life preservers are replaced in pouch and container after normal use.

11. Make necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series.

Section 20-4. Illustrated Parts Breakdown (IPB)

20-68. GENERAL.

20-69. This section lists and illustrates the assemblies and detail parts of the LPP-1 and LPP-1A Life Preserver Assemblies.

20-70. The Illustrated Parts Breakdown should be used during maintenance when requisitioning and identifying parts.

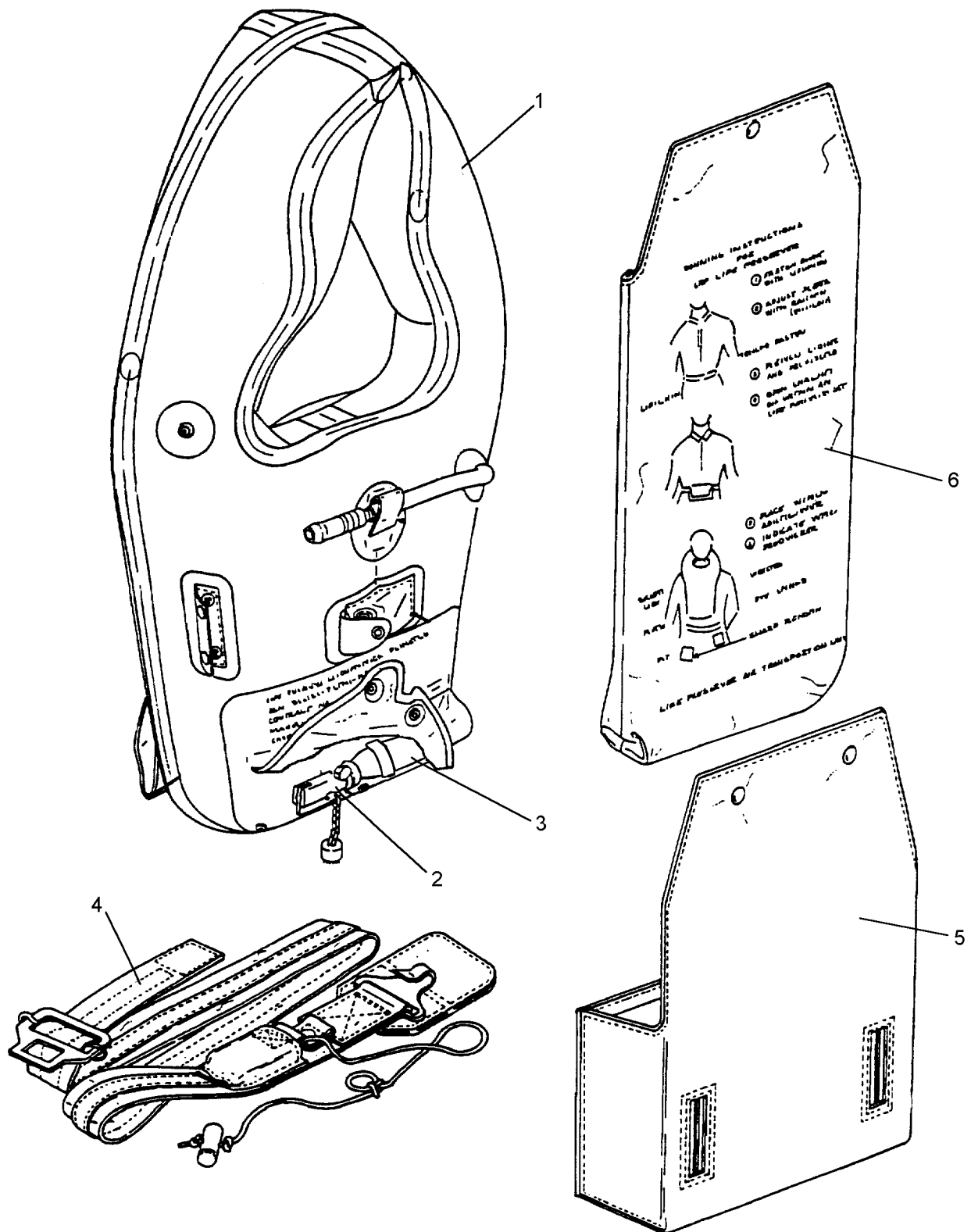


Figure 20-8. LPP-1 and -1A Life Preserver Assembly, Illustrated Parts Breakdown

10200008

NAVAIR 13-1-6.1-2

Figure and Index Number	Part Number	Description	Units Per Assembly	Usable On Code
		1 2 3 4 5 6 7		
20-8	No Number	LPP-1, -1A LIFE PRESERVER ASSEMBLY	REF	
-1	36H1336-1	. LIFE PRESERVER, LPP-1, Inflatable	1	A
	68A94D2-1	. LIFE PRESERVER, LPP-1A, Inflatable	1	B
-2	SAF-T-PAK	. . INFLATION VALVE ASSEMBLY	1	A
		(See Note 1)		
	MIL-L-25370	. . INFLATION VALVE ASSEMBLY	1	B
		(Type 2)		
-3	NIIN 00-372-0585	. . . CO ₂ CYLINDER, 25-28 Grams	1	A
		(MIL-C-25369, Type 1)		
	NIIN 00-543-6693	. . . CO ₂ CYLINDER, 28-31 Grams	1	B
		(MIL-C-25369, Type 2)		
-4	68A94D4-1	. . BELT ASSEMBLY	1	
-5	68A94D5-1	. . POUCH ASSEMBLY	1	
-6	36D1340-1	. . STORAGE CONTAINER ASSEMBLY	1	A
		(LPP-1)		
	68A94D11-1	. . STORAGE CONTAINER ASSEMBLY	1	B
		(LPP-1A)		
	NOTE: 1. SAF-T-PAK inflation assembly no longer carried by supply. Use until no longer serviceable and replace with MIL-L-25370 (Type 2).			

NUMERICAL INDEX

Part Number	Figure and Index Number	SM&R Code
-------------	----------------------------	--------------

MIL-L-25370	20-8-2	PA--Z
NIIN 00-372-0585	20-8-3	PAOZZ
NIIN 00-543-6693	20-8-3	PAOZZ
SAF-T-PAK	20-8-2	
36D1340-1	20-8-6	PAOZZ

Part Number	Figure and Index Number	SM&R Code
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36H1336-1	20-8-1	PAOGG
68A94D2-1	20-8-1	PAOGG
68A94D4-1	20-8-4	PAOZZ
68A94D5-1	20-8-5	PAOZZ
68A94D11-1	20-8-6	PAOZZ

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